Amendments to the claims:

1.   (currently amended) A device for locating metallic objects, with only one transmit coil (116) and one receive turn system (112, 114; 212, 214) with at least one receive coil (112, 114; 212, 214), which are inductively coupled to one another, wherein electrical switching means (1,..., 8; 1'a, 2'a, 3'a, 1'b, 2'b, 3'b) are provided, which make it possible to vary the number of turns of the receive turn system (112, 114; 212, 214), wherein the number of turns of the at least one receive coil (112, 114; 212, 214) is variable by connecting or disconnecting electrical conductor modules, and wherein connected electrical conductor modules are coupled inductively with the transmit coil.

2.   (canceled)

3.   (original) The device as recited in Claim 1, wherein the switching means (1,..., 8; 1'a, 2'a, 3'a, 1'b, 2'b, 3'b) are located between turns (113, 213) of a first receive coil (112, 212) and turns (115, 215) of a second receive coil (114, 214).

4.   (previously presented) The device as recited in Claim 1, wherein the electrical switching means comprises jumpers (1', 2', 3') with switching means (1'a, 2'a, 3'a, 1'b, 2'b, 3'b) located between receive coil turns (213', 215') with a different radius R_a or R_b.

5.   (canceled)

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6.   (previously presented) The device as recited in Claim 1, wherein the switching means (1,...,8; 1'a, 2'a, 3'a, 1'b, 2'b, 3'b) are realized using semiconductor components.

7.   (previously presented) The device as recited in Claim 1, wherein at least two receive coils (112, 114; 212, 214) are located coaxially relative to each other.

8.   (original) The device as recited in Claim 1, wherein at least two receive coils (112, 114; 212, 214) are located in a plane.

9.   (currently amended) The device as recited in Claim 1 [[5]], wherein at least two receive coils (112, 114; 212, 214) are designed as printed circuit coils, particularly on a printed circuit board.

10.   (currently amended) The device as recited in Claim 9 [[6]], wherein the switching means (1,...,8; 1'a, 2'a, 3'a, 1'b, 2'b, 3'b) are realized using semiconductor switches on the printed circuit board.

11.   (original) The device as recited in Claim 8, wherein at least one transmit coil (116) is located in a plane which is positioned with a height offset and is parallel to at least one receive coil.

12.   (canceled)

13.   (canceled)

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14.   (canceled)

15.   (currently amended) A method for operating an inductive compensation sensor (110, 210), with ~~at least~~ <u>only</u> one transmit coil (116) and at least one receive turn system (112, 114; 212, 214), comprising the following steps:

adjusting a voltage U induced in a receive coil (112, 114; 212, 214) by connecting an adjustment turn system (113, 115; 213', 215') to turns (113, 115; 213, 215) of the at least one receive turn system (112, 114; 212, 214), wherein said adjustment turn system (113, 115; 213', 215') including one or more compensation modules (220, 222, 224).

16.   (previously presented) The method as recited in Claim 15, further comprising the step of switching between m different alternative configurations (1'a, 2'a, 3'a, 1'b, 2'b, 3'b) of the electrical contacting for each compensation module (220, 222, 224).

17.   (previously presented) The method as recited in Claim 15, wherein the adjustment turn system (113, 115; 213', 215') is composed of at least n (n=1 ... N) independent compensation modules KM_n (220, 222, 224), each having m(n) (m(n)=1 ... M(n)) different configurations, in which a voltage change $\Delta U_{n,m}$ is induced, with $\Delta U = (U(n,m) - U(n,m+1))$, in the receiving branch (212, 214) of the compensation sensor (210) by selectively switching between individual configurations m of a compensation module KM_n (220, 222, 224).

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18. (previously presented) The method as recited in Claim 17, wherein the compensation modules KM_n (220, 222, 224) are configured such that the voltage change $\Delta U_{n,m}$ differs from the voltage difference $\Delta U_{n-1,m}$, with $\Delta U_{n-1,m}=(U(n-1, m)-U(n-1, m+1))$, of compensation module KM_{n-1} by the factor $M(n-1)$, with an ordinal number n reduced by one.

19. (previously presented) The method as recited in Claim 17, wherein binary coding with $M(n)=2$ is used for the compensation modules KM_n (220, 222, 224) of the adjustment turn system (113,115; 213', 215'), so that the relationship $\Delta U = (U(n,1) - U(n,2)) = 2*(U(n-1,1) - U(n-1,2))$ applies.